

Project Title : Research on broomrape control in potato in Bozdağ (Ödemiş), Turkey

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Supporting Body : TÜBİTAK 106G074

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Summary : Potato is an important summer crop in Bozdap, a site with 1200 m. of attitude in the Ödemiş District, Turkey. Two broomrape species (*Phelipanche ramosa* L. Pome I/ *P. aegyptiaca* (Pers.) Pomel.) has been seen for ten years in Bozdağ in spite of no broomrape infestation in autumn and spring potatocropping in the lowlands of Ödemiş. Field studies were carried out to control broomrape by imazapic 2,5 + 2,5 and 5 g/ha, glyphosate 12 + 12 g/ha, imazethapyr 5 g/ha, rimsulfuron 12,5 +12,5 g/ha, chlorsulfuron 0,24-0,48 ml/da in 2008 and 2009. Experiments were randomized complete block design with four replications and repeated twice. Emergence and dry weight of broomrape were measured to assess the effect of treatments. Data of two years were pooled. The number of emerged broomrape was 44 and 22 per m² in herbicide experiments. Glyphosate (24 + 24 g/ha) % 77,4, glyphosate (12 g/ha) % 76,9, rimsulfuron (12 12 g/ha) % 59,9 and the remaining herbicide applications led to less than % 50 decreased broomrape.